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Status Report on the Implementation and Evaluation of the Social Health Maintenance Organization Demonstration

Report to Congress
1996

U.S. Department of Health and Human Services
Health Care Financing Administration
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CONTENTS

STATUS REPORT ON THE IMPLEMENTATION AND EVALUATION OF THE SOCIAL HEALTH MAINTENANCE ORGANIZATION DEMONSTRATION

EXECUTIVE SUMMARY

In 1985, the Social Health Maintenance Organization (Social HMO) demonstration, designed by Brandeis University, was implemented in four sites, located in Long Beach, California; Minneapolis/St. Paul, Minnesota; Brooklyn, New York; and Portland, Oregon. Features of the Social HMO demonstration model implemented by these sites include voluntary enrollment financed by Medicare capitation, private premiums, and Medicaid payments (for eligible enrollees); a core benefit package of acute Medicare covered benefits, expanded benefits (all Part A and B services), and long term care services; capitated payment from Medicare based on modifying the adjusted average per capita cost (AAPCC) formula; and a case management system to coordinate long term care services.

In September 1985, the Health Care Financing Administration (HCFA) awarded a contract to the University of California, San Francisco, to perform an independent evaluation of the Social HMO demonstration. This second interim report summarizes the evaluation findings, addressing issues regarding enrollment and disenrollment patterns, health status changes, utilization and expenditure patterns, enrollee satisfaction, the role of case management, and the effects of the demonstration on informal caregiving to Social HMO enrollees. The evaluation findings cover the period 1985 through 1989 for the Social HMO sites.

The Social HMO sites experienced favorable enrollment and disenrollment over the first three years of operation, a finding similar to enrollment and disenrollment patterns in other section 1876 HMOs. The rate of disenrollment was lower across this period than that found in prior studies of HMOs. While well Social HMO enrollees were more satisfied with a variety of features of the Social HMO (e.g., access to and convenience of care) than enrollees in the fee-for-service system, enrollees who were frail were less satisfied with these features than their fee-for-service counterparts. Assessed by case-mix adjusted standardized mortality rates, there were no significant differences between Social HMO enrollees and enrollees in the fee-for-service system. Expenditure data presented a mixed picture, with some sites appearing to reduce expenditures and other sites appearing to increase expenditures, relative to fee-for-service comparison individuals.

In 1990, Congress authorized an expansion of the Social HMO demonstration, with the purpose of refining the Social HMO model of care in areas such as targeting for long term care benefits, as well as financing methodologies. Following completion of design work and related activities, HCFA released a request for proposal to organizations to participate in the second generation Social HMO demonstration in June 1994. Six sites were selected, located in Martinez, California; Coral Gables, Florida; Worcester, Massachusetts; Las Vegas, Nevada; Columbia, South Carolina; and Grand Junction, Colorado.

The developmental period of the project began on January 16, 1995. The University of Minnesota and the University of San Francisco, California have been providing technical assistance to participating organizations as they conduct and complete pre-implementation activities such as configuring the long term care benefit package they will offer under the demonstration. Implementation of the second generation Social HMO sites is targeted for July 1996.

The design and implementation of the Social HMO project for individuals with end stage renal disease, authorized by Congress in 1993, has been conducted on a separate track. Site selection is in process, with an anticipated site award date to one or more organizations in September 1996. This project, after undergoing a 9 to 12-month development period, will operate for a 3-year demonstration period.

An evaluation will be conducted for the second generation Social HMO targeted toward the elderly, as well as the end stage renal disease Social HMO project. Results from these evaluations, in combination with findings from the 1985 to 1989 evaluation of the first generation Social HMO sites will be used in forming recommendations to Congress regarding the Social HMO model.

STATUS REPORT ON THE IMPLEMENTATION AND EVALUATION OF THE SOCIAL HEALTH MAINTENANCE ORGANIZATION DEMONSTRATION

I. INTRODUCTION

A. Summary of Legislative Requirements

This report has been prepared pursuant to section 2355 of P. L. 98-369, the Deficit Reduction Act of 1984. Section 2355 required the Secretary of the Department of Health and Human Services to approve, with appropriate terms and conditions, applications or protocols submitted to waive certain requirements of titles XVIII and XIX of the Social Security Act so as to demonstrate the concept of a social health maintenance organization (Social HMO). Furthermore, Congress mandated that these demonstrations be implemented in organizations described under the Health Care Financing Administration (HCFA) Project No. 18-P-97604/1 with the University Health Policy Consortium, Brandeis University.

The statutory language states four salient features of the Social HMO model:

- Provides for the integration of health and social services under the direct financial management of a provider of services;
- All Medicare services will be provided by or under arrangements made by the organization at a fixed annual capitation rate for Medicare of 100 percent of the adjusted average per capita cost (AAPCC);
- Medicaid services will be provided at a rate approved by the Secretary; and
- All payers will share risk for no more than 30 months with the organization being at full risk in the third year.

Section 2355 required that HCFA sponsor an evaluation of the Social HMO demonstration. The legislation also directed that the Secretary submit 2 reports to Congress:

- A preliminary report to the Congress on the status of the projects and waivers referred to in subsection (a) 45 days after the date of the enactment of the legislation; and
- A final report to the Congress on the projects referred to in the legislation not later than 42 months after the date of the enactment of the legislation.

Section 4018(b) of P. L. 100-203, the Omnibus Budget Reconciliation Act (OBRA) of 1987, extended the demonstration through September 30, 1992, changed the final report to an interim report, and required a final report by March 31, 1993.

Section 4207(b)(4) of P. L. 101-508, OBRA 90, extended the demonstration through December 31, 1995, changed the final report to a second interim report and required a final report by March 31, 1996. The legislation requires approval of not more than four additional projects. The purpose of the second generation of Social HMOs is to refine the targeting and financing methodologies and benefit design of a Social HMO. The legislation also directed authorization of funds for technical assistance and an evaluation of the second generation Social HMO sites.

Section 5079 of P. L. 103-66, OBRA 93, extended the demonstration through December 31, 1997, and required a final report by March 31, 1998. OBRA 93 further mandates that the feasibility of a site to serve beneficiaries with end stage renal disease be explored as one of the second generation Social HMOs.

B. Purpose of this Report

This report corresponds to the requirement for a second interim report to Congress. The report summarizes the demonstration design; provides an update of the status of the operational Social HMO sites; reviews the status and activities related to the evaluation of the operational sites; provides a summary of the published findings for the evaluation period 1985 through 1989; and discusses the status of the design, implementation, and evaluation of the second generation Social HMO sites.

II. SUMMARY OF THE DEMONSTRATION DESIGN

The Social HMO demonstration design was developed by Brandeis University under HCFA Project No. 18-P-97604/1. The four Social HMO demonstration sites test essentially the same protocol that includes:

- Voluntary enrollment model financed by Medicare capitation, private premiums, and Medicaid payments (for eligible enrollees);
- Common health and functional status assessment instruments to assist in determining an enrollee's eligibility for chronic care services;

- A core benefit package of acute Medicare covered benefits, expanded benefits (all Part A and B services), and long term care services;

- Capitated reimbursement from the Medicare program based on modifying the AAPCC formula used to reimburse risk-contract health maintenance organizations (HMOs) and competitive medical plans; and

- Risk-sharing arrangements between the demonstration sites, HCFA, and State Medicaid programs to reduce the potential impact on sponsoring organizations of financial losses attributable to undertaking organizational innovation with uncertain outcomes.

The core Social HMO benefit package includes standard benefits offered by HMOs that contract under section 1876 of the Social Security Act (e.g., hospital, physician, skilled nursing home, and home health). Expanded benefits also available include eye glasses and prescription drugs. (Dental coverage was also offered in the original benefit package by three of the sites, but this benefit was later dropped or made optional with additional premiums.) Limited long term care benefits available in this demonstration include intermediate nursing care and community-based long term care such as homemaker/chore, personal health aide, medical transportation, adult day health care, respite care, and case management. The regular Medicare benefits and expanded benefits are available to all Social HMO members. The long term care benefits are available only to enrollees who have been determined to need such care. This typically means that the enrollee meets the criteria for nursing home admission established by the participating site's State Medicaid agency.

The Social HMO long term care benefit package has the following features:

- The Social HMO long term care services package is primarily intended to emphasize availability of community-based services. It integrates institutional nursing home care and noninstitutional, community-based services including homemaker, personal care aide, medical transportation, adult day health care, respite care, and case management. Decisions on how to appropriately allocate home and community-based and institutional chronic care services are controlled by Social HMO case managers.

- Through periodic health and functional status assessments, the Social HMOs assess eligibility for long term care services. This eligibility determination process is an attempt to target long term care benefits to those Social HMO enrollees at greatest risk of institutionalization, as defined by State Medicaid agency criteria.

- The amount of long term care services that an eligible functionally-impaired enrollee may receive is capped by dollar limits. These benefit ceilings range from $6,500 to $12,000 per year, with sites differing in allocation procedures by time period (e.g., monthly or spell of illness limits within the yearly cap) and type of benefit (e.g., nursing home care or community-based care). Sites were permitted to change benefit packages during the demonstration. For example, lifetime limits were placed on institutional benefits by some sites.

The AAPCC payments to Social HMOs differ from AAPCC payments to section 1876 HMOs in the following ways:

- Social HMO members receive a functional status assessment upon joining. If a plan finds a person living in the community at risk of institutionalization (as measured by State Medicaid agency pre-admission screening protocols), the Social HMO receives an institutional rate of payment from HCFA, even though these members are not institutionalized. This factor was updated, effective for calendar year 1995.

- In comparison to standard AAPCC rate books used to pay section 1876 HMOs, payment levels to Social HMOs for noninstitutionalized, Medicare-only and noninstitutionalized welfare (i.e., Medicaid eligible) enrollees were modified, generally resulting in reduced payment levels for these persons. Both healthy and frail enrollees are included in the noninstitutional rate cells for section 1876 HMOs. (With frail, community-dwelling beneficiaries removed from the noninstitutionalized cells in the Social HMO, it is assumed that enrollees remaining in the noninstitutional cells are healthier.) Therefore, a downward adjustment compensates for an assumed less expensive case-mix among unimpaired, community-based Social HMO enrollees compared to noninstitutionalized beneficiaries paid for under the standard AAPCC formula.

- One hundred (100) percent of all rate cell amounts, rather than 95 percent of the AAPCC, is paid by HCFA to the Social HMOs.

In contrast to section 1876 HMOs, which must enroll Medicare beneficiaries on a first-come, first-served basis without regard to health status (except for those persons with end-stage renal disease), Social HMO demonstration site protocols allow the sites to screen applicants to assure that the demonstration enrolls a representative community sample of functionally-impaired persons. This queuing mechanism was intended to protect both the Social HMOs and the government from adverse selection, since both shared risk for financial losses during the first 30 months of the demonstration. Evidence from the first interim report indicated that queuing assisted the sites in maintaining an enrolled population that was representative of the area. There are no

empirical data to suggest that queuing affected enrollment build-up. The ability to meet enrollment projections appears to have been related to the selected market area, competition within that area, and certain program design features such as selected aspects of the Social HMO delivery system (e.g., access to physicians or hospitals).

III. STATUS OF SOCIAL HMO OPERATIONAL SITES

The Social HMO demonstration projects became operational in 1985 at four sites. Two sites were established by mature section 1876 HMOs: Kaiser Permanente Northwest developed Medicare Plus II in Portland, Oregon, and Group Health (now HealthPartners, Inc.) and Ebenezer Society developed a partnership in Minneapolis-St. Paul, Minnesota, to establish Seniors Plus. Two were developed by long term care organizations: the Metropolitan Jewish Geriatric Center established Elderplan in Brooklyn, New York, and Senior Health Action Network established SCAN Health Plan in Long Beach, California.

Membership size varied across sites. Although each site had expected to enroll about 4,000 individuals, all sites experienced initial difficulties in obtaining this target. Only Kaiser Permanente's Medicare Plus II met its minimum enrollment target of 4,000 members within the first 18 months after program startup. Elderplan had a slow enrollment pattern during the first 24 months of operation (2,502), but enrollment then showed a steady increase to 5,000 members in 1988 and 5,082 in 1989. Seniors Plus was the least successful in meeting its initial membership target, with only 2,572 enrolled members by 1987 and 3,256 by the end of 1989. SCAN Health Plan experienced similar slow growth, reaching 3,057 members by the end of 1988 and then showing a decline by 1989.

In January 1995, Seniors Plus, the Minneapolis site, withdrew its participation from the demonstration. Enrollment at the remaining three sites has continued to grow, and currently 19,000 Medicare beneficiaries are enrolled in the demonstration.

Sites shared financial risk with HCFA and the State Medicaid agencies (for three of four sites) during the first 30 months, 1985 through mid-1987 and have operated at full risk since 1987.

IV. EVALUATION OF THE SOCIAL HMO DEMONSTRATION

A. Evaluation Questions

In September 1985, HCFA awarded a contract to the University of California, San Francisco, to conduct an independent evaluation of the Social HMO demonstration. The evaluation was designed to address several issues related to

enrollees and nonenrollees, operational characteristics of the Social HMOs, and program outcomes. Specific areas of evaluation include the following:

- o Marketing efforts, the market, and environmental conditions affecting each site's operations;
- o Patterns of change in the organizational form;
- o Selection bias in initial enrollment and in attrition;
- o Factors associated with decisions to enroll or not enroll in a Social HMO;
- o Utilization of specific acute and long term care services;
- o Health status and mortality rates among Social HMO members and nonmembers;
- o Public, third party, and out-of pocket expenditures for acute and chronic care services;
- o The effectiveness of case management in controlling long term care services use and costs and assuring access to appropriate levels of care; and
- o Levels of informal caregiving and changes over time.

An interim Report to Congress was submitted in 1988, covering demonstration activities in 1986 and 1987. Results of the final evaluation study, covering the years 1985 through 1989, are summarized in this second interim report, as are the activities related to the review of those findings. Detailed evaluation findings are provided in a series of recently completed journal articles, and are included as Appendix A.

B. Evaluation Methodology

The primary source of program utilization and financial data was unaudited quarterly and special reports submitted by the demonstration sites to HCFA. Individual level health care use was compiled from claims obtained from the Medicare Automated Data Retrieval System and from Social HMO program management information systems. Interviews with Social HMO officials were conducted at each demonstration site to complement, augment, and validate the site provided data. Respondents included executive directors and such other staff as case managers, medical directors, marketing directors, selected board

members, and former staff. The interviews were conducted on-site three times between January and December 1986, by telephone in spring 1987 and during on-site visits in the summer of 1988, and again with telephone interviews in 1989 and 1990 to clarify interpretations and comments on the preliminary findings. Focused questions concerned organization structure and interdepartmental relationships, management, and provider arrangements found in other studies to be related to the financial success of prepaid health plans. Correspondence, contracts, board minutes, reports by the sites, audit reports, and other documents were also collected and analyzed.

In addition to program-related data, three samples were developed to serve as a basis for comparing Social HMO performance with that of fee-for-service (FFS) and HMO populations. These included a probability sample (N=16,664) of Medicare beneficiaries receiving FFS care and living in the demonstration market area and a probability sample of Medicare beneficiaries who had enrolled in a section 1876 HMO (n=3,001) during the Social HMOs' initial enrollment period (January 1985 through March 1986). The Social HMO group (n=10,838) consisted of all active members as of June 30, 1986 (in Long Beach and Portland) and December 31, 1986 (in Brooklyn and Minneapolis). Baseline health status and Medicare claims for the previous 12 months were compiled for these samples. All sample members were tracked for the full evaluation period to obtain information on health plan membership and mortality. Social HMO and FFS samples were also tracked, at least annually, to update health status.

Persons with functional disabilities were given in-home assessments which were updated semi-annually. Out-of-pocket service use was also obtained for individuals reporting functional disabilities. In addition to this basic case tracking, there were two special telephone surveys among subsamples of these other groups. One was conducted to examine health plan awareness and choice among Social HMO members (n=1,301), those beneficiaries that chose to enroll in HMOs (n=957), and those that remained in FFS (n=1,900). The survey was conducted between May 1986 and January 1987. The second survey was conducted between July and October of 1988 to assess the health plan satisfaction of Social HMO (n=1,588) and FFS (n=1,626) members and Social HMO disenrollees (n=594).

C. Evaluation Review

An interim report on the first 30 months of the demonstration operation was submitted to Congress in March 1988. That report examined: the problems and successes of the Social HMOs in enrolling members, including Medicaid-eligible Medicare beneficiaries and persons "at risk" of institutionalization; the financial

performance of the plans measured in terms of planned versus actual per member per month acute and chronic care utilization, expenditures, and revenues; and the operational and management characteristics of the plans themselves, including case managers and the implementation of benefit eligibility.

This second interim report summarizes evaluation findings for the Social HMO demonstration period from January 1985 through September 1989 and addresses the evaluation questions previously presented. Certain evaluation findings, covering enrollee bias in enrollment and disenrollment, enrollee health status and mortality, and enrollee utilization and expenditure trends, were subject to independent review beyond HCFA staff review. These findings were reviewed by an expert panel comprised of biostatisticians, econometricians, and experts in the area of HMO managed care. The additional review process was due to questions raised by the Social HMO consortium of sites related to the analytic methods used, treatment of survey items, and related methodological issues. Findings were further examined through a peer review process, prior to acceptance for publication; a series of 14 peer reviewed journal articles has been published between 1991 and 1996 and is provided as an Appendix to this report.

Further, use of analytic techniques in addition to those used by HCFA's independent evaluator would enable the Social HMO experience as it relates to enrollment and disenrollment patterns, health status changes, and utilization and expenditure trends to be more directly compared to existing studies of section 1876 HMOs regarding these issues. These analyses were conducted by the evaluator and results of these additional analyses were incorporated in published articles.

D. Evaluation Summary

Enrollees and Nonenrollees

Awareness and choice: Social HMO enrollees most frequently learned about plan availability by mass marketing and cited additional benefits (e,.g., prescription drugs, long term care) as the principal reason for choosing their plan.

Enrollment: The Social HMOs experienced favorable enrollment, measured both by health status and prior health use. Three of four Social HMOs enrolled a population that was healthier than their FFS group -- they enrolled more people in healthy case-mix categories and fewer people in case-mix classes characterized by acute or chronic illnesses. Three of four plans enrolled individuals who had lower expenditures in the year prior to joining the Social HMO, relative to the FFS individuals.

Disenrollment: Both voluntary disenrollment and mortality from all case-mix classes other than the healthy class resulted in favorable disenrollment for the Social HMOs, relative to their FFS comparisons. Social HMOs had lower rates of total disenrollment than section 1876 HMOs within five of six case-mix classes. Social HMO enrollees tended to re-enter the FFS sector, while section 1876 disenrollees tended to enter another section 1876 plan. For the frail case-mix group, the disenrollment rate to the FFS sector was similar for the Social HMOs and section 1876 plans.

Over the first 36 months (1985 through 1987), disenrollment was 26 percent across Social HMO sites. The average annual disenrollment rate of 8.6 percent was lower than the rates of 10 to 30 percent found in other studies of non-Medicare HMO members and lower than the 15.5 percent rate found in the first year of the Medicare Competition Demonstration.

Based on a telephone survey of Social HMO enrollees who enrolled in 1985 and disenrolled between June 1987 and September 1988, relative to those continuing enrollment, bivariate analyses suggested that enrollees with acute or chronic conditions were more likely to disenroll from the Social HMO than healthy members. Both the functionally impaired and unimpaired primarily disenrolled for reasons related to physicians and medical care. Additionally, the unimpaired were twice as likely to disenroll due to perceived high premiums.

In multivariate analyses relating enrollees characteristics, service use, and Social HMO plan to disenrollment, several factors were positive predictors of disenrollment -- having other health insurance, not living alone, having inadequate information upon enrollment, having no physical impairments or health problems, and having no use of either a hospital or long term care. Switching from the Social HMO to another HMO rather than the FFS sector was associated with having no health problems, having no other health insurance, living alone, and being married.

Satisfaction: Based on a telephone survey of Social HMO enrollees enrolled continuously from 1985 through 1988, Social HMO unimpaired members displayed a small but statistically significant higher satisfaction than their FFS counterparts in all dimensions of satisfaction measured (e.g., access, benefits, costs) except interpersonal relations with physicians. Social HMO functionally impaired members had satisfaction scores lower than their FFS counterparts; they only exceeded the FFS group on satisfaction with benefits and costs.

Operational Characteristics of the Social HMOs

Financial Performance: When overall revenue and expenditures are considered, the four Social HMOs reported losses in the first 36 months of operation, losing between $0.2 and $3.4 million annually. In the fourth year, two of four plans reported excess revenues, while in the fifth year (1989), only one plan reported excess revenues.

Case Management: All Social HMO sites used their case management units as the entry point into any long term care benefits. Case managers were responsible for initially assessing, periodically reassessing all members receiving long term care benefits, and coordinating services being provided. The newly formed HMOs (e.g., Elderplan and SCAN) also assigned case management staff to assist in hospitalization review and discharge planning. By 1989, between 7.5 and 13.7 percent of Social HMO members were receiving case management.

Long term care benefits are financed through premiums paid by all plan members, and copayments and deductibles associated with each service. The case managers were successful in their resource allocation role, as measured by the proportion of members exhausting their long term care benefit, a proportion that never exceeded 2 percent of the total membership at any site. The goal of integrating acute and long term care into a coordinated continuum of care was not reached. The principal obstacle seemed to be the absence of working linkages to primary care physicians.

Program Outcomes

Enrollee Health Outcomes: Two indicators of health outcomes were used: mortality and active life expectancy. Outcomes were measured over 36 months and then compiled into annual rates and life table estimates. These estimates were adjusted for age, gender, and health status. Assessed solely on the basis of case-mix standardized mortality rates, there were no significant differences between Social HMO enrollees relative to their FFS counterparts. However, Social HMO enrollees do diverge on mortality when separately comparing males to females, age cohorts, or health status classes. Life expectancy was higher in the FFS group because, at later ages and in the impaired classes, the FFS group's case-mix specific mortality rates were lower. Among males, there was a consistent pattern of at least one year longer life expectancy for those in the FFS sector. This was true for all health status classifications and age intervals. Among females, the findings differed by the estimation model. When a non-

variant baseline health status measure was used, females experienced longer life expectancy in the Social HMO. When health status was allowed to be a dynamic factor in the model, females experienced longer life expectancy in the FFS sector.

A second dimension of the Social HMO performance concerns the likelihood of active life expectancy among surviving individuals. Both Social HMO and FFS groups had a similar proportion of their healthy members who continued in a "healthy" class over time. In most health status groups the Social HMOS had a higher proportion of surviving enrollees who changed from an ill or impaired classification to a healthy classification. However, the FFS group had substantially more of its less healthy members surviving from one period to the next.

Service Use and Expenditures: Service use and expenditures were examined for 1987 and 1988, the years for which the most complete data were available from the Social HMO sites. In 1987, the last year of financial risk-sharing between the sites and HCFA, the Social HMOS generally reported higher expenses in each health status group than the FFS group. For individuals who were in the healthy case-mix group, the differences between the Social HMOS and the FFS group were largely in expenditures for physician and outpatient care. Among the other case-mix groups, differences occurred largely in the expenditures for non-skilled nursing or home care. Higher physician expenditures also contributed to differences in the two section 1876 HMO-based plans.

In 1988, the first year under full financial risk, service use and expenditures were quite variable across the four sites. While Seniors Plus (Minneapolis) had equivalent or lower expenditures in all case-mix classes, Medicare Plus II (Portland) and SCAN (Long Beach) experienced higher expenditures in all health status classes than their FFS comparisons. The fourth site, Elderplan (Brooklyn) had expenditures that were lower in four of six case-mix classes, having higher expenditures for enrollees who were acutely ill or were in the very frail case-mix category, relative to the FFS comparison group.

Informal Caregiving: Provision of community-based care was intended by the Social HMOs to augment but not replace informal care. Social HMO impaired members receiving formal community-based care were compared to similarly impaired persons in the FFS group: About two-thirds of each group were male, less than half were married, at least one-third were living alone, and the majority needed assistance in performing at least three activities of daily living (ADLs). Among Social HMO members there was a decline on average of one instrumental activity of daily living (IADL) or ADL caregiving task following the initial case manager assessment, a decline not evident among comparison group members.

At subsequent reassessment intervals, informal caregiving increased, so that by the end of the tracking period there were no differences in informal caregiving between Social HMO enrollees who were impaired and receiving case management, relative to their FFS counterparts.

Summary

When interpreting these findings, it is important to bear in mind that most analyses cover the initial 3-year implementation period of an innovative service delivery model. There is a certain learning process to implementing a new model, such as the Social HMO. It takes time for service providers to establish service delivery networks, integrate new benefits, and adjust to different payment methodologies -- all features of the Social HMO experience. At a time when community-based care systems were just beginning to move beyond demonstrations to established systems of care, the Social HMO sites were able to effectively provide a case-managed long term care benefit comprised largely of such community-based services.

Yet, as previously noted, the goal of integrating the long term care services with acute care did not appear to be attained. This appeared principally to be due to the absence of working relationships between physicians, responsible for enrollees' acute care services, and case managers, responsible for coordinating the long term care services. In the second generation Social HMO, we expect to improve coordination through the use of information systems that link physicians and case managers; the use of geriatric evaluation and management teams comprised of physicians, case managers, and other professionals; and the use of physician and case management practice protocols around common geriatric problems.

Disenrollment rates in the Social HMO, for the first 3 years, were lower that rates found in other studies of HMOs, including Medicare section 1876 HMOs. While the Social HMO sites experienced favorable enrollment, as well as favorable disenrollment, this experience matches that of other studies of section 1876 HMOs. Further, Social HMOs were fearful that the expanded long term care benefit would result in adverse selection, with more frail individuals seeking such services. This unrealized fear may have caused the Social HMOs to be overly cautious in marketing the model to frail individuals. The findings regarding enrollment and disenrollment suggest the need to continue to address payment refinements that will encourage HMOs to enroll and appropriately care for more frail or at-risk elders. With this in mind, a new payment methodology was developed for second generation Social HMOs that explicitly incorporates enrollee functional status, health status, and a variety of medical conditions as

variables, with sites receiving higher payments for enrollees with functional limitations, poor health status, and/or a history or presence of certain medical conditions associated with high-risk elderly.

The satisfaction and health status findings further demonstrate the need to continue refining the model, so as to be responsive to at-risk, frail elderly enrolled in HMOs. While well Social HMO enrollees were more satisfied with various aspects of care than their FFS counterparts, frail Social HMO enrollees were less satisfied with their care. Although satisfied with the costs associated with the Social HMO, relative to the FFS system, those who were frail expressed dissatisfaction in areas such as interpersonal relations with physicians and access to and convenience of care. Both mortality and active life expectancy findings further point to the need to closely attend to the health care needs of the at-risk, frail elderly in HMOs, as they seemed to fair less well in the Social HMO. In response, the second generation Social HMO incorporates a variety of activities to assist physicians and other providers in appropriately attending to the needs of frail elderly. As previously noted, the use of practice protocols for common geriatric problems, the use of geriatric evaluation and management teams for at-risk enrollees, and the use of case management protocols for common health and social issues associated with those who are at-risk are intended to improve the Social HMO's capacity to integrate care for the acute and long term care needs of the frail elderly.

V. STATUS OF THE DESIGN AND IMPLEMENTATION OF THE SECOND GENERATION SOCIAL HMOs

Section 4207(b)(4) of P. L. 101-508, OBRA 90, requires approval of not more than 4 additional projects. The purpose of these second generation Social HMOs is to refine the targeting and financing methodologies and benefit design of a Social HMO. The design of these sites is flexible and may include a test of the effectiveness or feasibility of the following:

- The benefits of expanded post-acute and community care management through links between chronic care case management services and acute care providers;
- Refining targeting or reimbursement methodologies;
- The establishment and operation of a rural service delivery system; and
- The effectiveness of second-generation sites in reducing the costs of the commencement and management of health care service delivery.

In July 1991, cooperative agreements were awarded to Brandeis University and the University of Minnesota to assist HCFA in the design of the second generation Social HMO model. The previously discussed evaluations findings, although preliminary at the time, were drawn upon in this design work. Based on the recommendations of the design reports, in combination with a review of several recent studies of innovations in geriatric care in section 1876 HMOs and other health care settings, findings from the Social HMO independent evaluation as previously described, and input from a panel of technical experts, HCFA released a request for proposal to organizations to participate in the second generation Social HMO demonstration in June 1994.

After a comprehensive review of the applications submitted in response to the grant announcement and a series of pre-award site visits six organizations were chosen for participation in the demonstration in January 1995. These organizations are:

CAC-United HealthCare Plans of Florida -- Coral Gables, Florida
Contra Costa Health Plan -- Martinez, California
Fallon Community Health Plan -- Worcester, Massachusetts
Health Plan of Nevada, Inc. -- Las Vegas, Nevada
Richland Memorial Hospital -- Columbia, South Carolina
Rocky Mountain HMO -- Grand Junction, Colorado

The primary components of the second generation Social HMO demonstration are: (1) a pervasive geriatric care approach; (2) an expanded case management system with acute and long term care linkage; (3) a long term care benefit package; and (4) a risk-adjusted payment methodology.

Geriatrics: In the second generation Social HMO demonstration the participating sites will implement a series of protocols or guidelines to identify and treat common geriatric problems, such as dementia, incontinence, hypertension, and falls. These protocols will be used to introduce geriatric principles into the practice of primary care physicians. The goal of the geriatric intervention is to change the practice patterns of the primary care physicians and, concomitantly, improve the provision of care to elderly Medicare beneficiaries.

Case Management: Case management will be interdisciplinary and interactive. Care coordinators will work closely with physicians to develop a plan of care that meets the health, social, functional, and environmental needs of the beneficiary. The second generation Social HMO demonstration will expand the responsibility and role of case management. Geriatric evaluation and management will be integral components of care coordination. Beneficiaries who are disabled, have long term care needs, or are at risk of developing a chronic care condition will be eligible for case management.

Long Term Care Benefit Package: Each site will develop a long term care benefit package with services such as homemaker/home health aide, medical transportation, adult day care, respite care, and nursing home placement. The long term care benefit must include a mix of noninstitutional and institutional services not currently available under a section 1876 HMO.

Payment Methodology: The risk-adjusted payment methodology designed for the second generation Social HMO is expected to more accurately reflect the health status of beneficiaries enrolled in the project. The factors used to develop the payment rate were limitations in ADLs, limitations in IADLs, gender, self-reported health status, and several prevalent medical conditions such as coronary disease, cancer, and diabetes. The estimated coefficients from the regression model will be used to adjust upward or downward that county AAPCC for a given enrollee. The regression coefficients replace the current AAPCC rate cell structure.

The developmental period of the project began on January 16, 1995. It is currently scheduled to end June 30, 1996. The University of Minnesota and the University of San Francisco, California have been providing technical assistance to the participating organizations as they conduct and complete pre-implementation activities such as configuring the long term care benefit package they will offer under the demonstration. Implementation is targeted for July 1996.

The design and implementation of the Social HMO project for individuals with end stage renal disease has been conducted on a separate track. The design for this project, which includes additional, non-Medicare covered benefits as well as an alternative rate adjustment to the current AAPCC payment, has been completed. A Federal Register notice was published in January 1996, and solicitation packets were mailed February 1996. Proposals are due in May, with an anticipated award date to one or more organizations in September 1996. Following a 9- to 12-month development period, sites participating in the end stage renal disease Social HMO project will operate for a 3-year period.

Evaluations will be conducted for the second generation Social HMO targeted toward the elderly, as well as the end stage renal disease Social HMO project. Results from these evaluations, in combination with findings from the 1985 through 1989 evaluation of the Social HMO sites will be used in forming recommendations to Congress regarding the Social HMO model.

APPENDIX A

PUBLISHED REPORTS

SOCIAL HEALTH MAINTENANCE ORGANIZATION DEMONSTRATION

SOCIAL HMO DEMONSTRATION EVALUATION PUBLICATIONS

Harrington, C., R. Newcomer, and T. Moore. HMO Medicare Risk Contract Enrollment Success: An Overview of Contributing Factors. ***Inquiry;*** 25(Summer): 33-44, 1988.

Newcomer, R.J., C. Harrington and A. Friedlob. Awareness and Enrollment in the Social/HMO. ***The Gerontologist;*** 30(1): 86-93, 1990.

Newcomer, R.J., C. Harrington and A. Friedlob. Social Health Maintenance Organizations: Assessing Their Initial Experience. ***Health Services Research;*** 25(3): 425-454, 1990.

Harrington, C. and R.J. Newcomer. Social Health Maintenance Organizations as Innovative Models to Control Cost. ***Generations;*** 14(2): 49-54, 1990.

Harrington, C. And R.J. Newcomer. Social Health Maintenance Organizations" Service Use and Costs, 1985-1989. ***Health Care Financing Review;*** 12(3): 37-52, 1991.

Harrington, C., M. Lynch, and R.J. Newcomer. Medical Services in Social Health Maintenance Organizations. ***The Gerontologist;*** 33(6): 790-800, 1993.

Harrington, C., R.J. Newcomer, and S. Preston. A Comparison of S/HMO Enrollees and Continuing Members. ***Inquiry;*** 30(4): 429-440, 1993.

Manton, K., R. Newcomer, J. Vertrees, G. Lowrimore and C. Harrington. Social/Health Maintenance Organization and Fee for Service Health Outcomes Over Time. ***Health Care Financing Review;*** 15(2): 173-202, 1993.

Manton, K., R. Newcomer, J. Vertrees, G. Lowrimore and C. Harrington. A Method of Adjusting Capitation Payment to Managed Care Plans Using Multivariate Patterns of Health and Functioning: The Experience of Social/Health Maintenance Organizations. ***Medical Care;*** 32(3): 277-297, 1994.

Manton, K., H.D. Tolley, R. Newcomer, J. Vertrees and C. Harrington. Disenrollment Patterns of Elderly in Managed Care and Fee-for-Service. ***Journal of Actuarial Practice;*** 2(2): 171-196, 1994.

Newcomer, R., C. Harrington and S. Preston. Satisfaction in the Social/Health Maintenance Organization: A Comparison of Members, Disenrollees, and Those in Fee-for-Service. In H. Luft (Ed.). ***HMOs and the Elderly.*** Ann Arbor, MI: Health Administration Press, 1994, 111-139.

Newcomer, R.J., K. Manton, C. Harrington, C. Yordi, and J. Vertrees. Case-Mix Controlled Service Use and Expenditures in the Social Health Maintenance Organization Demonstration. ***Journal of Gerontology, Medical Sciences;*** 50a(1): M35-M44, 1995.

Manton, K. R. Newcomer, G. Lowrimore, J. Vertrees and C. Harrington. Evaluating Long Term

Care Demonstrations in Real Time with Study Design and Plan Performance Interactions. ***Medical Care;*** 33(11): 1210-1227, 1995.

Manton, K., R. Newcomer, G. Lowrimore and J. Vertrees. Prior and Current Costs in Capitated Health Plans: The Effect of Health Status at Enrollment. ***Journal of Aging and Health;*** 8(2): 183-206, 1996.

Newcomer, R., S. Preston and C. Harrington. Health Plan Satisfaction and Risk of Disenrollment Among Social/HMO and Fee-for-Service Recipients. Forthcoming, ***Inquiry.***